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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,352	02/02/2004	Carl E. Whitcomb	WHIT/0002.A	7661
24945	7590	07/26/2005	EXAMINER	
STREETS & STEELE 13831 NORTHWEST FREEWAY SUITE 355 HOUSTON, TX 77040			NGUYEN, SON T	
		ART UNIT		PAPER NUMBER
				3643

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/770,352	WHITCOMB, CARL E.
	<b>Examiner</b>	<b>Art Unit</b>
	Son T. Nguyen	3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 12 May 2005.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) 41-45 and 51-62 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-40 and 46-50 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 May 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-4,7,11,12,20,26,27,37-40,46** are rejected under 35 U.S.C. 102(b) as being anticipated by Reynolds et al. (US 3080680).

For claim 1, Reynolds et al. teach a sidewall for a plant container comprising a substantially water-impermeable root-tip-trapping region (the fibrous walls of the pot 18 and the sheet 60, col. 5, lines 5-8,38-42,65-75); and a porous air-root-pruning region (col. 6, lines 15-21, the bottom of sheet 60 is perforated, thus allowing air to enter) adjacent to the root-tip-trapping region.

For claim 2, Reynolds et al. teach the root-tip-trapping region is collinear with the air-root-pruning region (the pruning region is at the bottom area as stated in col. 6, lines 15-21).

For claim 3, Reynolds et al. teach the root-tip-trapping region comprises a porous fabric layer (the fibrous pot, col. 3, lines 20-25 and col. 5, lines 65-75) bonded (by the device of Reynolds et al.'s invention) to a layer of a root-impenetrable material 60.

For claim 4, Reynolds et al. teach the root-tip-trapping region is contiguous upper portion of the sidewall and the air-root-pruning region is a contiguous lower portion of the sidewall (col. 6, lines 15-21).

For claim 7, Reynolds et al. teach the sidewall is flexible and rigid.

For claim 11, Reynolds et al. teach the edge of the sidewall is secured by bonding using device of Reynolds et al.

For claim 12, Reynolds et al. teach the root-impenetrable material is water-impermeable (col. 5, lines 38-42, the sheet 60 can trap air which means that water cannot pass through either).

For claim 20, Reynolds et al. teach the porous fabric is degradable (col. 5, lines 65-75).

For claim 26, Reynolds et al. teach the root-impenetrable material is a polymer sheet (col. 5, lines 5-7).

For claim 27, Reynolds et al. teach the root-impenetrable material is selected from polyethylene and polypropylene (col. 5, lines 5-7).

For claim 37, Reynolds et al. teach the sidewall is an integral part of a container.

For claim 38, Reynolds et al. teach the sidewall is a discrete panel (initially since it is fibrous/fabric material) that can form a container.

For claim 39, Reynolds et al. teach two or more root-tip-trapping regions (any area along the sidewall).

For claim 40, Reynolds et al. teach two or more air-root-pruning regions (any area along the bottom of the pot where the perforations exist, col. 6, lines 15-20).

For claim 46, Reynolds et al. teach a sidewall for a plant container comprising a water permeable, porous fabric layer (the fibrous pot wall, col. 5, lines 65-75) and a

water impermeable, root-impenetrable layer 60 bonded (by the device as shown) to a portion of the outer face of the fabric layer.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 5,6,8,9,14-16,24,32,33,36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (as above).

For claims 5 & 6, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the root-tip-trapping region of Reynolds et al. comprising between ½ and 9/10 or 2/3 and ¾ of the sidewall of the pot of Reynolds et al., since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable value/ranges until the desired effect is achieved involves only routine skill in the art.

For claim 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the root-tip-trapping and air-root-pruning regions of Reynolds et al. form a bendable sheet, since it is notoriously well known in the art that a pot can be flaccid for ease of transport.

For claim 9, it would have been an obvious substitution of functional equivalent to substitute the perforations of the air-root-pruning regions of Reynolds et al. with an air-root-pruning regions with protuberances having outwardly extending distal ends that are

open, since both types of air-root-pruning region would allow the roots to penetrate to the area outside the container.

For claims 14-16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the porous fabric of Reynolds et al. with a weight between 2 and 10 ounces per square yard, a weight between 4 and 6 ounces per square yard, and openings between 1/16 and 1/4 inch, since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable value/ranges until the desired effect is achieved involves only routine skill in the art.

For claim 24, it would have been an obvious substitution of functional equivalent to substitute the bonding process as taught by Reynolds et al. with gluing and/or laminating, since both types of bonding method would perform to attach the layers together.

For claims 32 & 33, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the root-impenetrable material of Reynolds et al. with a thickness between 2 and 10 mils or 3 and 5 mils, since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable value/ranges until the desired effect is achieved involves only routine skill in the art.

For claim 36, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the regions of the pot of Reynolds et al. with a

pattern, depending on the user's preference as to where he/she wants the root growth to develop.

5. **Claims 10,13,17-19,47-50** are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (as above) in view of Reiger (US 6202348).

For claims 10 & 13, Reiger teaches a sidewall for a container wherein the root-tip-trapping region includes protuberances 160 having outwardly extending distal ends that are closed to trap roots (col. 7, lines 57-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the root-tip-trapping region of Reynolds et al. with protuberances 160 having outwardly extending distal ends that are closed to trap roots as taught by Reiger in order to trap the roots. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the root-tip-trapping region of Reynolds as modified by Reiger comprising greater than 10 root-tip-trapping elements/protuberances per square inch, since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable value/ranges until the desired effect is achieved involves only routine skill in the art.

For claims 17-19,47, in addition to the above, Reiger teaches a spun bonded, needle punched fabric selected from polyester, polypropylene and polyolefin fiber, and a woven or knitted fabric (col .6, lines 5-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a spun bonded, needle punched fabric selected from polyester, polypropylene and polyolefin fiber, and a woven or knitted fabric as further taught by Reiger for the porous fabric of Reynolds et

al., since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious choice.

For claim 48, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the fabric of Reynolds et al. as modified by Reiger with a density between 2 and 10 ounces per square yard, since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable value/ranges until the desired effect is achieved involves only routine skill in the art.

For claims 49 & 50, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the root-impenetrable layer comprises polyethylene and the porous fabric comprises spun bonded fabric in the apparatus of Reynolds et al. as modified by Reiger, depending on the user's preference for the best material to use for certain area of the container to trap roots. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the polyethylene of Reynolds et al. as modified by Reiger with a thickness between 2 and 10 mils, since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable value/ranges until the desired effect is achieved involves only routine skill in the art.

6. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (as above) in view of Thomas (US 5311700).

Thomas teaches a sidewall for a container wherein he employ a porous fabric made out of cotton (col. 5, line 11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ cotton as taught by Thomas as the preferred porous fabric in the container of Reynolds et al., since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious choice.

7. **Claims 22,23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (as above) in view of Berlit et al. (GB 2073567).

Berlit et al. teach a sidewall for a container wherein they employ an opaque or black material to prevent light from harming the roots (page 1, lines 100-105). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an opaque or black material as taught by Berlit et al. in the container of Reynolds et al. in order to prevent light from harming the roots.

8. **Claims 25,29,31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (as above) in view of Van der Goorbergh (EP 300578A3).

For claims 25 & 29, Van der Goorbergh teaches a container having metal foil material (aluminum foil). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a metal foil material as taught by van der Goorbergh in the container of Reynolds et al. in order to reflect harmful light away from the plant.

For claim 31, in addition to the above, van der Goorbergh teaches the root-impenetrable material 6 being white (col. 2, line 55 & col. 3, line 1). It would have been

obvious to one having ordinary skill in the art at the time the invention was made to employ a white polymer sheet as taught by van der Goorbergh as the preferred material for the root-impenetrable material of Reynolds et al. in order to reflect harmful light away from the plant (col. 2, lines 54-55 of van der Goorbergh).

9. **Claims 28,34,35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (as above) in view of Flasch, Jr. (US 5852896).

For claim 28, Flasch teaches a sidewall for a container comprising a root-impenetrable material 6 made out of metal (col. 12, line 38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ metal as taught by Flasch as the preferred root-impenetrable material of Reynolds et al., since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious choice.

For claims 34 & 35, in addition to the above, Flasch teaches root-impenetrable material 6 being biodegradable such as wood (col. 12, line 38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ wood as taught by Flasch as the preferred material for the root-impenetrable material of Reynolds et al. in order to provide a more user's friendly pot for the environment.

10. **Claim 30** is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. as modified by Berlit et al. as applied to claims 1,3,22 above, and further in view of Flasch (as above).

In addition to the above, Flasch teaches using a UV inhibitor to provide UV light stability (col. 12, line 45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a UV inhibitor as taught by Flasch in the root impenetrable material of Reynolds et al. in order to block out harmful UV radiation.

***Response to Arguments***

11. Applicant's arguments filed 5/12/05 have been fully considered but they are not persuasive.

**Applicant argued that Reynolds et al. do not anticipate in the claimed invention and do not expressly or inherently disclose a root-tip-trapping region.**

Reynolds et al. do anticipate in the claimed invention as mentioned above, especially col. 5, lines 5-7,38-42,65-75. Clearly reading col. 5, lines 65-75, one can see that the roots are trapped between the skin and the pot and cannot penetrate through the skin. The roots grow in the interface between the skin and pot. Thus, as stated above, the root-tip-trapping region is the interface between the skin and the fibrous pot, and the air region is the perforation at the bottom of the skin as stated in col. 6, lines 15-21.

**Applicant argued that Reynolds et al. do not expressly disclose any structure that possesses the characteristic of an air-pruning region.**

Again, clearly from col. 6, lines 15-21, Reynolds et al. teach that the skin has perforations at the bottom, thus, perforations allow air or other fluid to enter the bottom region of the device. Even if the pot is planted in the soil, air still exists in the bottom region. What if the pot is suspended?

**Applicant argued that Reynolds et al. do not disclose both a root-tip-trapping region and an air-root-pruning region in the same sidewall.**

Who is to say that a bottom wall is not a sidewall because, technically, a sidewall is just a wall that forms a side of something, so why can't a bottom portion of a container be considered a bottom sidewall? The claimed language is broad, thus, will be interpret as such. Although Applicant believes that sidewall is directed to the vertical side only, a bottom sidewall is also a term known in the art too. When a language merely claims a sidewall and does not specified which sidewall, the language is interpret as broad as it is being claimed.

**Applicant argued that there's no motivation to combine Reynolds et al. with Reiger or other prior art.**

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is clearly stated in the above to combine the references. For example, Reiger was combined for the feature of protuberances to trap the roots, so since Reynolds et al. discuss in col. 6, lines 65-75, regarding roots trapping, it would be obvious to combine the teaching of Reiger for a root trapping teaching with Reynolds et al.

**Applicant argued that Reiger does not teach protuberances.**

A protuberance is something that protrudes, therefore, the fuzzy elements 160 that trap roots are protuberances because they protrude outward from the device.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Nguyen whose telephone number is 571-272-6889. The examiner can normally be reached on Mon-Thu from 10:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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